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# FACILITY PERMIT TO OPERATE ULTRAMAR INC (NSR USE ONLY)

### SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID	Connected	RECLAIM	Emissions *	Conditions
Equipment	No.	То	Source Type/ Monitoring Unit	And Requirements	Conditions
Process 10 : TREATING/ST	RIPPING				
System 13: FUEL GAS TREATING UNIT 88				S4.6, S13.2, S15.12, S31.5	
MIXER, INLINE, STATIC, CAUSTIC, 88-MX-1	D1642				
A/N: 465660					
VESSEL, KNOCKOUT DRUM, CAUSTIC WASH, 88-V-1, DIAMETER: 5 FT; HEIGHT: 14 FT	D1643				
A/N: 465660					
MIXER, INLINE, STATIC, WATER WASH, 88-MX-2	D1644				
A/N: 465660					
VESSEL, KNOCKOUT DRUM, WATER WASH, 88-V-2, DIAMETER: 4 FT; HEIGHT: 12 FT	D1645				
A/N: 465660					
VESSEL, DEGASSING DRUM, SPENT CAUSTIC, 88-V-3, DIAMETER: 2 FT 6 IN; HEIGHT: 7 FT	D1646				
A/N: 465660					
MIXER, INLINE, STATIC, MAKE-UP CAUSTIC, 88-MX-3	D1647				
A/N: 465660					
TANK, SPENT CAUSTIC, 41-TK-01, DIAMETER: 26 FT; HEIGHT: 23 FT	D682	C1648			
A/N: 465660					
CARBON FILTER, TWO CANISTERS IN SERIES, 400 LBS CARBON PER CANISTER	C1648	D682			D90.14, E128.1, E153.1
A/N: 465660					
FUGITIVE EMISSIONS, MISCELLANEOUS	D1649			HAP: (10) [RULE 63SUBPART CC, #5A,	H23.16
A/N: 465660				06/23/03]	



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#### **FACILITY CONDITIONS**

F8.1 The operator shall comply with all applicable mitigation measures stipulated in the "Statement of Findings, Statement of Overriding Considerations, and Mitigation Monitoring Plan" document which is part of the AOMD Certified Subsequent Environmental Impact Report dated 08/30/2002 for this facility.

[CA PRC CEQA, 11-23-1970]

- F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:
  - (a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or
  - (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

[RULE 401, 3-2-1984; RULE 401, 11-9-2001]

F10.1 Material(s) that contain the following compound(s) shall not be used in this facility;

Total Reduced Sulfur

H2S

Hydrogen Fluoride

This condition shall not apply if the operator demonstrates to the satisfaction of the Executive Officer that the facility is in compliance with the operational air quality mitigation measures stipulated in the Reformulated Fuels Project EIR as follows:

- a. Implementation of an inspection and maintenance program for all odor sources.
- b. Installation and inspection of a deluge system in the alkylation unit. The deluge system shall be inspected quarterly and flow tested semi-annually.
- c. Installation and inspection of elevated monitors with water spray system covering all area of the alkylation



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The operator shall comply with the terms and conditions set forth below:

- unit. The system shall be inspected weekly and flow tested monthly.
- d. Conduct safety review for the GOH unit, revision and implementation of the Risk Management and Prevention Plan (RMPP) for hydrogen sulfide.
- e. Conduct safety review for the Sulfur Recovery Unit, revision and implementation for the RMPP for hydrogen sulfide.

[CA PRC CEQA, 11-23-1970]

F14.1 The operator shall not purchase diesel fuel, for stationary source application as defined in Rule 431.2, containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

[RULE 431.2, 5-4-1990; RULE 431.2, 9-15-2000]

- F24.1 Accidental release prevention requirements of Section 112(r)(7):
  - a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).
  - b). The operator shall submit any additional relevant information requested by the Executive Officer or designated agency.

### [40CFR 68 – Accidental Release Prevention, 5-24-1996]

F25.1 The permit holder of this facility shall not install, alter, or operate a refinery process unit or other non-Rule 219 exempt equipment without a valid RECLAIM/TitleV permit issued by the AQMD pursuant to Rule 201 – Permit to Construct, Rule 203 - Permit to Operate, Rule 2004 - Requirements, and Rule 3002 - Requirements, as applicable.

Notwithstanding the above, the provisions of Rules 201, 203, 2004, and 3002 shall not apply to installations or alterations that involve only the equipment listed in Table 1 below, nor shall they apply to the operation of equipment listed in Table 1, when directly associated with permitted process units or other permitted equipment.

Notwithstanding the above, all new equipment listed in Table 1, including associated fugitive components installed with such equipment, shall have Best Available Control Technology installed in conformance with the



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The operator shall comply with the terms and conditions set forth below:

Best Available Control Technology Guidelines in effect at the time of the installation.

#### TABLE 1

- (a) Heat Exchanger (including air-cooler, reboiler, cooler, condenser, and shell and tube exchanger)
- (b) In-line Mixer
- (c) Pump
- (d) Knockout Pot Compressor inlet (immediate inlet) and interstage
- (e) Knockout Pot Fuel Gas System (downstream of fuel gas mix drums)

This condition applies only to the facility that processes petroleum as defined in the Standard Industrial Classification Manual as Industry No. 2911 - Petroleum Refining, as well as its directly associated sulfur recovery plant which may be located outside of the facility.

[RULE 2004, 5-11-2001; RULE 2004, 4-6-2007]

F34.2 The operator shall not sell refinery gas containing sulfur compounds in excess of 40 ppmv, calculated as hydrogen sulfide, averaged over 4-hour period.

[RULE 431.1, 6-12-1998]

F52.1 This facility is subject to the applicable requirements of the following rules or regulation(s):

California Code of Regulations, Title 13, Division 3, Chapter 5

40 CFR 79

40 CFR 80

[40CFR 79, 7-1-1999; 40CFR 80, 7-1-1999; CCR Title 13, 9-24-1999]

F52.2 This facility is subject to the applicable requirements of the following rules or regulation(s):

40 CFR 60 Subpart A



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The operator shall comply with the terms and conditions set forth below:

40 CFR 61 Subpart A

40 CFR 63 Subpart A

40 CFR 63 Subpart GGGGG

[40CFR 60 Subpart A, 5-16-2007; 40CFR 61 Subpart A, 5-16-2007; 40CFR 63 Subpart A, 5-16-2007; 40CFR 63 Subpart GGGGG, 11-29-2006]

F52.3 This facility is subject to the applicable requirements of the following rules or regulation(s):

CONSENT DECREE CIVIL NO. SA-05-CA-0569. The facility shall send the District a copy of the semiannual update report sent to the EPA of the specific requirement of emission standards and limitations from the Consent Decree. This report shall also identify any anticipated future requirements known as of the date of the report and dates of compliance for the requirements.

#### [CONSENT DECREE VALERO, 6-16-2005]

F60.1 The emission limits identified in Section D and H of the permit shall be defined as emissions discharged to the atmosphere from the originating equipment.

#### SYSTEM CONDITIONS

S4.6 The following condition(s) shall apply to all affected devices listed under Sections D and H of this system for fugitive emissions of Volatile Organic Compounds (VOC):

All components are subject to District Rule 1173 and 40CFR60, Subpart GGG.

All new components in VOC service as defined in Rule 1173, except valves and flanges shall be inspected quarterly using EPA reference method 21. All new valves and flanges in VOC service except those specifically exempted by Rule 1173 shall be inspected monthly using EPA Method 21.

All new components in VOC service, a leak greater than 500 ppm but less than 1,000 ppm measured as methane above background as measured using EPA Method 21, shall be repaired within 14 days of detection. Components shall be defined as any valve, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173.



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The operator shall comply with the terms and conditions set forth below:

All new valves greater than 2-inch size and major components in VOC service as defined by Rule 1173, except those specifically exempted by Rule 1173 shall be distinctly identified from other components through their tag numbers (e.g. numbers ending in the letter "N"), and shall be noted in the records.

All new valves in VOC service except those specifically exempted by Rule 1173, shall be bellow-sealed valves for 2-inch and smaller size, except in the following applications: heavy liquid service, control valve, instrument piping/tubing, applications requiring torsional valve stem motion, applications where valve failure could pose safety hazard (e.g. drain valves with valve stems in horizontal position), and retrofits with space limitation.

If 98.0 percent or greater of the new valve and the new flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppm for two consecutive months, then the operator shall revert to a quarterly inspection program with the approval of the executive officer.

The operator shall keep records of the monthly inspection (and quarterly where applicable), subsequent repair, and reinspection, in a manner approved by the District.

[RULE 1173, 5-13-1994; RULE 1173, 6-1-2007; RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; 40CFR60, Subpart GGG, 6-2-2008]

[Systems subject to this condition: Process 4, System 5; Process 10, System 1, 10, 11, 13]

S13.2 All devices under this system are subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1123

[RULE 1123, 12-07-1990]

[Systems subject to this condition: Process 1, System 1, 3, 5; Process 2, System 1, 3, 5; Process 3, System 1; Process 4, System 1, 3, 5, 7; Process 5, System 1; Process 7, System 1, 3; Process 8, System 1, 2, 3, 4, 5; Process 9, System 1; Process 10, System 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13; Process 11, System 1, 2; Process 17, System 46, 50, 97]



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The operator shall comply with the terms and conditions set forth below:

S15.12 The vent gases from all affected devices of this process/system shall be vented as follows:

All emergency vent gases shall be directed to a blowdown vapor recovery system and/or blowdown flare system.

When the emergency vent gases are being directed to the blowdown vapor recovery system, this process/system shall not be operated unless the blowdown vapor recovery system is in full use and has a valid permit to receive vent gases from this system.

When the emergency vent gases are being directed to the blowdown flare system, this process/system shall not be operated unless the blowdown flare system is in full use and has a valid permit to receive vent gases from this system.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 05-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Systems subject to this condition: Process 1, System 1, 3, 5; Process 2, System 1, 3, 5; Process 3, System 1; Process 4, System 1, 3, 5, 7; Process 5, System 1; Process 7, System 1, 3; Process 8, System 1, 2, 3, 4; Process 9, System 1; Process 10, System 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13; Process 13, System 1; Process 14, System 5, 6; Process 17, System 46,50, 88, 97]

S31.5 The following BACT requirements shall apply to VOC service fugitive components associated with the devices that are covered by application number(s) 416627 (Unit 43), 416624 (Unit 56), 416622 (Unit 68), 416626 (Unit 69), 416633 (Unit 82-V-9), 416628 (Unit 86-B-9003), and 465660 (Unit 88):

All open-ended lines shall be equipped with cap, blind flange, plug, or a second valve.

All pressure relief valves shall be connected to closed vent system or equipped with rupture disc.

All process drain shall be equipped with water seal, or a closed-vent system and control device complying with the requirements of 40CFR60 Subpart QQQ section 60.692-5.

All sampling connections shall be closed-purge, closed-loop, or closed-vent system.



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The operator shall comply with the terms and conditions set forth below:

All valves in VOC service shall be of leakless type, except those specifically exempted by Rule 1173 or approved by the District in the following applications: heavy liquid service, control valves, instrument piping/tubing, applications requiring torsional valve stem motion, applications where failures could pose safety hazards (e.g. drain valves with valve stems in horizontal position), retrofits with space limitations, and valves not commercially available at the time of Permit to Construct issuance.

For the purpose of this condition, leakless valve shall be defined as any valve equipped with sealed bellow or equivalent as approved in writing by the District prior to installation. Components shall be defined as any valve, flange, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, meter, and any instrumentation which are not exempted by Rule 1173.

All components in VOC service, except valves and flanges shall be inspected quarterly using EPA reference method 21. All valves and flanges in VOC service except those specifically exempted by Rule 1173 shall be inspected monthly using EPA method 21.

All components in VOC service, a leak greater than 500 ppm but less than 1,000 ppm measured as methane above background using EPA Method 21, shall be repaired within 14 days of detection. A leak greater than 1,000 ppm shall be repaired according to Rule 1173.

If 98.0 percent or greater of the new valve and flange population inspected is found to leak gaseous or liquid VOC at a rate less than 500 ppm for two consecutive months, then the operator may revert to a quarterly inspection program with the approval of the Executive Officer. This condition does not apply to leakless valves.

The operator shall keep records of the monthly inspection (and quarterly where applicable), subsequent repair, and reinspection, in a manner approved by the District.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 05-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Systems subject to this condition: Process 4, System 7; Process 7, System 1, 3; Process 8, System 4; Process 10, System 13; Process 14, System 5, Process 15, System 4]

#### **DEVICE CONDITIONS**

#### **D.** Monitoring/Testing Requirements



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The operator shall comply with the terms and conditions set forth below:

D90.14 The operator shall periodically monitor the VOC concentration at the outlet of the carbon canister according to the following specifications:

The operator shall monitor at least once per month.

The operator shall use an appropriate analyzer in accordance with EPA Test Method 21 to monitor the parameter.

The operator shall calibrate the instrument use to monitor the parameter to ppmv methane.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 05-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition: C1648]

#### **E. Equipment Operation/Construction Requirements**

E128.1 The operator shall keep all spent carbon in a tightly covered container which shall remain closed except when it is being transferred into or out of the container.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 05-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition: C1648]

E153.1 The operator shall change over the carbon in the adsorber whenever breakthrough occurs.

For the purpose of this condition, breakthrough occurs when the hydrocarbon monitor reading indicates a concentration of 500 ppmv at the outlet of the operating carbon adsorber.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 05-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]



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The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition: C1648]

### H. Applicable Rules

H23.16 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173
VOC	40CFR60, SUBPART	GGG

[RULE 1173, 5-13-1994; RULE 1173, 6-1-2007; 40CFR60, Subpart GGG, 6-2-2008]

[Devices subject to this condition: D594, D708, D1327, D1328, D1342, D1351, D1363, D1364, D1649]